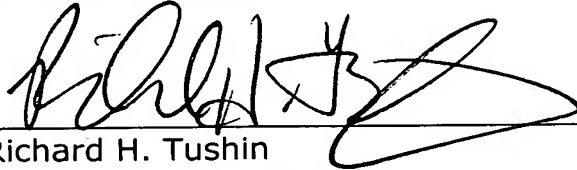


REMARKS

By this Preliminary Amendment the specification and claims have been amended to insert alternative pressure values.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Richard H. Tushin', is written over a horizontal line.

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**MARKED-UP VERSION OF THE CHANGES MADE  
TO THE SPECIFICATION**

**Appln. No. 10/069,921**

Page 7, paragraph between lines 3 and 18.

Furthermore, in raw material powder for R-Fe-B bonded magnets, there is rapidly quenched powder obtained by quenching a prescribed alloy melt with a quenching roller, making it amorphous, and then subjecting it to a crystallizing heat treatment, and hydrogenation treated powder obtained by taking coarsely pulverized powder obtained by coarsely pulverizing an alloy ingot of a prescribed composition, heating and holding that at a temperature of 500°C to 900°C for 30 minutes to 8 hours, for example, either in 0.1 atm (10kPa) or higher but 10 atm (1MPa) or lower (room temperature conversion, hereinafter represented as 0.1 atm (10kPa) to 10 atm (1MPa), with the same applying to ranges of other units indicated as from some value to some value) of H<sub>2</sub> gas or in an inactive or inert gas (excluding N<sub>2</sub> gas) having an H<sub>2</sub> partial pressure equivalent thereto, and then subjecting that to a de-H<sub>2</sub> treatment by holding it at 500°C to 900°C for 30 minutes to 8 hours under a 1 X 10<sup>-2</sup> Torr (1.33Pa) H<sub>2</sub> partial pressure to yield such hydrogenation treated powder comprising a fine recrystallized aggregate structure having an average crystal particle size of 0.05 µm to 1 µm.

Page 7, paragraph between line 19 and page 8, line 4.

In the present invention, in the heat treatment in the water vapor pressure atmosphere, the water vapor pressure should preferably be 15 mmHg (2kPa) to 350 mmHg (45kPa). At a water vapor pressure of less

than 15 mmHg (2kPa), the reaction to  $R(OH)_3$  is insufficient, and requires a long time, leading to high manufacturing costs, wherefore that is undesirable. When 350 mmHg (45kPa) is exceeded, on the other hand, the magnetic characteristics of the magnetic raw material powder decline greatly, wherefore that is not desirable. An even more preferable water vapor pressure range is 50 mmHg (6.5kPa) to 200 mmHg (26kPa).

Page 15, paragraphs between lines 3 and 25.

Coarsely pulverized powder was used, obtained by ingot pulverization, having an average particle size of 150  $\mu\text{m}$ , and a composition consisting of 12.8 at.% R, 6.3 at.% B, 14.8 at.% Co, 0.25 at.% Ga, 0.09 at.% Zr and the remainder Fe. The coarsely pulverized powder was subjected to an  $H_2$  occlusion treatment, holding it for 1.5 hours at 820°C in 1 atm (100kPa) (room temperature equivalent) of  $H_2$  gas, then subjected to a de- $H_2$  treatment, holding it for 0.5 hour at 850°C in flow of Ar gas at a reduced pressure of 40 Torr (5332.9Pa) to yield a hydrogenation-treated powder having a fine recrystallized aggregate structure with an average crystal particle size of 0.4  $\mu\text{m}$ . The  $R_2O_3$  content in the hydrogenation-processed powder so obtained was 200 ppm and the  $R(OH)_3$  content therein was 0.9 ppm.

Taking this hydrogenation-treated powder as magnet raw material powder, it was subjected to a heat treatment, holding it for 15 hours at a temperature of 70°C in an atmosphere having a water vapor pressure of 180 mmHg (23kPa) to yield a molding powder. The  $R_2O_3$  content in the molding powder so obtained was 7 ppm and the  $R(OH)_3$  content therein was 180 ppm.

Into the molding powder so obtained were mixed 3.5 wt.% of an epoxy resin, and that was then molded, under a molding pressure of 6 T/cm<sup>2</sup>, in a magnetic field of 12 kOe (950kA/m), to dimensions of 10 mm X 10 mm X 10 mm, after which heating was performed for 60 minutes at a hardening temperature of 150°C, whereupon 50 bonded magnets were fabricated.

**MARKED-UP VERSION OF THE CHANGES MADE  
TO THE TABLE**

**Appln. No. 10/069,921**

Table 2

	Magnetic Characteristics			External Conditions (Number of Occurrences)				Defect Ratio (%)
	Br (kG) (T)	iHc (kOe) k(A/m)	(BH)max (MGOe) (kJ/m <sup>3</sup> )	Red Rust	Crack flaws	Chip flaws	Swellings	
Example 2	8.2 <u>0.82</u>	11.8 <u>939.28</u>	15.0 <u>119.4</u>	0	0	0	2	4
Example 3	8.2 <u>0.82</u>	11.8 <u>939.28</u>	15.0 <u>119.4</u>	0	0	0	1	2
Example 4	8.2 <u>0.82</u>	11.9 <u>947.24</u>	15.0 <u>119.4</u>	0	0	0	0	0
Comparative Example 2	8.1 <u>0.81</u>	11.7 <u>931.32</u>	14.7 <u>117.012</u>	30	0	0	0	60
Comparative Example 3	8.2 <u>0.82</u>	11.9 <u>947.24</u>	15.1 <u>120.196</u>	0	7	5	28	80

**MARKED-UP VERSION OF THE CHANGES MADE  
TO THE CLAIMS**

**Appln. No. 10/069,921**

7. (Amended) The corrosion-resistant R-Fe-B bonded magnet manufacturing method according to claim 5 or 6, characterized in that conditions of treating in said water vapor pressure atmosphere area water vapor pressure of 15 mmHg (2kPa) to 350 mmHg (45kPa), and a treatment temperature of -10°C to 200°C.

8. (Amended) The corrosion-resistant R-Fe-B bonded magnet manufacturing method according to claim 7, characterized in that said conditions of treating in said water vapor pressure atmosphere are a water vapor pressure of 50 mmHg (6.5kPa) to 200 mmHg (26kPa), and a treatment temperature of 30°C to 80°C.

14. (Amended) The method for manufacturing powder for molding an R-Fe-B bonded magnet according to claim 13, characterized in that said water vapor pressure is 15 mmHg (2kPa) to 350 mmHg (45kPa), and a treatment temperature is -10°C to 200°C.

15. (Amended) The method for manufacturing powder for molding an R-Fe-B bonded magnet according to claim 14, characterized in that said water vapor pressure is 50 mmHg (6.5kPa) to 200 mmHg (26kPa), and said treatment temperature is 30°C to 80°C.